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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09,587,654	06/05/2000	Scott C. Miller	2171	8911

25280 7590 09/24/2002

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EXAMINER

JUSKA, CHERYL ANN

ART UNIT	PAPER NUMBER
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1771

18

DATE MAILED: 09/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/587,654	MILLER ET AL.	
	Examiner	Art Unit	
	Cheryl Juska	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) 59-68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6, 7, 9</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-58 and 65-68, drawn to a low weight cushion backed flooring article, classified in class 428, subclass 95.
 - II. Claims 59-68, drawn to a method of making a low weight carpet or carpet tile classified in class 156, subclass 78.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group II and Group I are related as process of making and product made.

The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the article can be made by forming a self-sustained foam layer and then bonding to the other laminate layers, rather than by forming the foam layer in-situ with one of said laminate layers. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

Art Unit: 1771

4. During a telephone conversation with Dan Alexander on March 20, 2002, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-58. Affirmation of this election must be made by applicant in replying to this Office action. Claims 59-68 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Double Patenting

6. Claims 53 and 57 are objected to under 37 CFR 1.75 as being identical duplicates of claims 52 and 56, respectively. Additionally, it is noted that there are two claim 8 listed (bottom of 44 and top of page 45) which recite identical subject matter. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1771

8. Claims 1-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. The terms "low face weight" and "light weight" in claim 1 are relative terms which render the claim indefinite. Although the values of said terms are described in dependent claims and the specification, these values cannot be read into the definition of said terms. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, relative terminology cannot be relied upon to distinguish patentability. It is suggested that the limitations of claims 2 and 10 be added to claim 1 to clarify what is meant by said relative terms. Claims 2-58 are rejected for the dependency upon claim 1.

10. Regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

11. Claim 15 is indefinite because it is unclear if the subject matter in parentheses is being positively claimed. Is the term "Prime urethane" equivalent "unfilled polyurethane or is said term a tradename of a polyurethane?"

12. Claims 23, 35, and 37-39 are rejected as being indefinite due to the relativeness of the claim limitations. Specifically, it is unclear to what degree the flooring is 'resilient,' 'comfortable,' 'seamable,' 'uniform,' 'constant,' 'durable,' 'crushable,' and "dense." These properties are not defined by the claim, the specification does not provide a standard for

Art Unit: 1771

ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

13. Claim 26 is indefinite for it is unclear what "performance characteristics" would rate the flooring for heavy commercial use. Additionally, the term "heavy commercial use" is relative.

14. Claim 34 is indefinite for the use of the phrase "wherein the low face weight carpet is aesthetically pleasing." Aesthetics are a subjective matter which can vary from person to person. Thus, what is pleasing to one person is not necessarily pleasing to another. Therefore, the claim limitation is relative and renders the claim indefinite.

15. Claims 37 and 38 are rejected for the lack of antecedent basis for the term "tiles." Although claim 1 indicates that the flooring may be tile, the claims are not so limited. It is suggested that the claims be amended to read that "the flooring is carpet tile, wherein said carpet tile has...."

16. Claim 39 is rejected for the use of the term "short pile." This term is also relative which is not described by the claim or specification.

17. Claims 40 and 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim. Said claims are not further treated on the merits due to their lack of clarity.

18. Claims 47, 48, and 50 are rejected for the use of the relative term "thin cushion layer." How thin is "thin?" Additionally, is this "thin cushion layer" the same or different than the "light weight cushion" of claim 1, from which claims 47, 48, and 50 depend?

Art Unit: 1771

19. Claim 47 is also rejected because it is unclear if the "low weight primary carpet" is the same or different than the "low face weight primary carpet" of claim 1, from which claim 47 depends. Claims 48-58 are similarly rejected.

Claim Rejections - 35 USC § 102

20. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21. Claims 1, 4-11, 19, 23, 26, 33-35, 37-39, 46-48, and 52-54 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,522,857 issued to Higgins.

Higgins '857 discloses a carpet tile with a stabilizing material embedded in an adhesive layer (title). Specifically, Higgins '857 teaches a tufted or bonded carpet comprising a primary carpet base 12 bonded to a foam cushion layer 14 via an adhesive layer 16 (abstract and col. 1, lines 26-33 and Figure 1). The adhesive layer includes a reinforcing glass scrim 18 embedded therein (col. 1, lines 26-33 and Figure 1). The adhesive layer may be a thermoplastic (i.e., hot melt) adhesive layer present in an amount ranging from 10-70 oz/yd², preferably about 50 oz/yd² (col. 1, lines 48-52). The cushion layer may be a polyurethane foam and range from 0.1" to 1.0" in thickness and 10-60 oz/yd² (col. 2, lines 1-6). Higgins '857 also teaches the presence of a latex pre-coat applied to the backloops of yarns tufted into the primary backing (col. 1, lines 37-38).

Art Unit: 1771

With respect to Applicant's limitations that the primary carpet has a "low face weight" and the cushion is "thin" or "light weight," it is argued that these limitations are inherently met by the Higgins '857 disclosure since said limitations are relative recitations. Thus, the Higgins '857 is inherently "low or light weight" in comparison to an article of a heavier weight and inherently "thin" in comparison to an article of a thicker material.

With respect to the limitation of claim 9, wherein the cushion layer is 'about 0.04 to 0.09" thick,' it is asserted that the recitation of 'about 0.09' includes Higgins '857 teaching of 0.1".

With respect to claim 15, wherein the cushion is limited to an unfilled polyurethane, it is noted that Higgins '857 is silent about the use of fillers.

With respect to the recitations to relative functional properties of claims 23, 26, 34, 35, and 37-39, it is asserted that said functional properties are inherently met by the Higgins '857 disclosure. For example, a foam cushion backing inherently has *at least some degree* of resiliency and under foot comfort as recited in claim 23.

Therefore, claims 1, 4-11, 19, 23, 26, 33-35, 37-39, 46-48, and 52-54 are anticipated by the cited Higgins '857 reference.

22. Claims 1, 4, 7, 15, 19-23, 26, 31, 33-39, 46-54, and 56-58 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,540,968 issued to Higgins.

Higgins '968 discloses a cushioned back carpet tile with a stabilizing nonwoven backing (title). The carpet comprises a tufted primary backing having a latex pre-coat thereon (col. 3, lines 53-58). Additionally, a hot melt adhesive layer may contain a fiberglass scrim reinforcement layer (col. 4, lines 42-44). A foam cushion backing layer is bonded to the primary

Art Unit: 1771

backing via the hot melt layer. Furthermore, a nonwoven felt layer of polyester and polypropylene is attached to said foam cushion layer in order to stabilize the carpet (abstract). The foam cushion layer may be a polyurethane foam having a density ranging from 12-20 lbs/ft³ (col. 6, lines 28-39). The foam layer may also have a layer of reinforcement at least partially embedded therein (col. 6, lines 21-27). As discussed above, Applicant's recitations to "low face weight" and "thin" or "light weight," it is argued that these limitations are inherently met by the Higgins '968 disclosure since said limitations are relative recitations.

Similarly, with respect to the recitations to relative functional properties of claims 23, 26, 34, 35, and 37-39, it is asserted that said functional properties are inherently met by the Higgins '968 disclosure.

With respect to claim 36, the Higgins '968 carpet may be patterned before or after cutting into tiles (col. 6, lines 40-42).

Therefore, claims 1, 4, 7, 15, 19-23, 26, 31, 33-39, 46-54, and 56-58 are anticipated by the cited Higgins '968 patent.

Claim Rejections - 35 USC § 102/103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claims 24, 25, and 27-30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either Higgins '857 or Higgins '968.

Art Unit: 1771

Claim 44 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Higgins '968, as applied to claim 29 above.

Although neither Higgins '857 nor Higgins '968 do not explicitly teach the physical properties of said claims, said properties are deemed to be inherent to the inventions of Higgins '857 and '968. Specifically, it is asserted that the claimed Gmax test, resilience rating, Appearance Retention Rating, color change test, pile height retention, and overall appearance change properties are inherently met since said properties are dependent upon the chemical and structural features of the invention. The Higgins' carpets anticipate Applicant's chemical and structural limitations, and as such, the resulting properties must also be inherent. The burden is upon Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 495. In the alternative, the presently claimed properties would obviously have been present as the Higgins '857 or Higgins '968 products are provided. Note *In re Best*, 195 USPQ 433.

With respect to the rejection of claim 44, which depends from claim 29, it is noted that Higgins '968 clearly teaches the presence of a nonwoven backing and a latex coating.

Claim Rejections - 35 USC § 103

25. Claims 2, 3, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '857 patent or the cited Higgins '968 patent in view of EP 048 986 issued to Porter et al.

With respect to claims 2 and 3, both Higgins patents are silent about the face weight of the primary carpet base. However, the presently claimed face weight of less than 20 oz/yd², preferably less than or equal to 15 oz/yd² is well known in the art. For example, Porter teaches a

Art Unit: 1771

polyurethane foam backed carpet having a nylon pile face weight of 14 oz/yd² (page 11, lines 22-30). Thus, it would have been obvious to one to choose a face weight as claimed in order to produce a light weight, yet durable and aesthetically pleasing carpet.

With respect to claim 45, it is argued that the limitation that the carpet is jet dyed is a method limitation in an article claim. As such, it is not given patentable weight at this time since the method of dyeing does not effect the final product in a manipulative sense. In other words, any method of dyeing still produces a final product of a dyed carpet.

26. Claims 12-14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '857 patent in view of EP 309 816 issued to Turner et al.

Claims 12, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '968 patent in view of EP 309 816 issued to Turner et al.

Claims 12, 14, and 18 limit the foam cushion layer to having filler present in amounts of 110, 190, and 15 parts by weight, respectively. Neither of the Higgins patents teach the use of a filler. However, fillers in foam cushions are very well-known in the carpet art. For example, Turner teaches the use of an inorganic filler in an amount ranging from 5-500 parts by weight (page 4, lines 54-58). Thus, it would have been obvious to include a filler in the carpets of Higgins' in order to reduce the amount of foam employed and to improve flame resistance.

With respect to claim 13, which limits the cushion to a weight less than that taught by Higgins '857, it is argued that said claim is still obvious over the prior art since cushion weights within the presently claimed range are known in the art. Specifically, Turner teaches a polyurethane foam cushion layer for a carpet may range from 5-500 oz/yd². Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to

Art Unit: 1771

decrease the amount of foam present, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 205 USPQ 215. in this case, a decrease in the amount of foam cushion present, would result in a lighter weight carpet which is easier to handle and install.

27. Claims 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '857 patent in view of the Higgins '968 patent.

Similarly, with respect to claims 20-22, Higgins '857 teaches the use of a high density urethane foam, but is silent with respect to what is considered "high density." Higgins '968 teaches a urethane foam having a density ranging from 12-20 lbs/ft³ (col. 6, lines 35-39). Thus, it would have been obvious to one skilled in the art to employ a foam having the density taught by Higgins '968 as the foam of the Higgins '857 invention. Motivation to do so would be the expectation of producing a light weight, yet cushiony carpet tile. Therefore, claims 20-22 are rejected as being obvious over the cited Higgins references.

28. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '857 patent in view of the Higgins '968 patent, in further view of the cited Porter reference.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Higgins '968 patent in further view of the cited Porter reference.

Claims 16 and 17 recite foam densities less than those taught by Higgins '968. However, foam densities of about 6-9 lb/ft³ are known in the art. For example, Porter teaches a polyurethane foam having a density of less than 13 lb/ft³ (page 5, lines 32-34). Therefore, it would have been obvious to one skilled in the art to employ a foam having the density taught by

Art Unit: 1771

Porter as the foam of either Higgins '968 or Higgins '857. Motivation to do so would be 16 and 17 are rejected as being obvious over the cited Higgins references.

29. Claims 5, 6, 8-11, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Higgins '968 patent in view of the Higgins '857 patent.

With respect to claims 5 and 6, Higgins '968 is silent with respect to the amount of hot melt present. However, as noted above, Higgins '857 teaches said the hot melt layer may be in the range of 10-70 oz/yd². Thus, it would have been obvious to employ the hot melt adhesive layer in an amount as taught by Higgins '857 in the carpet tile of Higgins '968 with the expectation of producing a strong bond between the primary backing and the foam cushion of the carpet tile.

With respect to claims 8, 9, and 32, Higgins '968 is silent with respect to the thickness of the foam cushion layer. However, as noted above, Higgins '857 teaches said foam layer may be in the range of 0.1-1.0 inches. Thus, it would have been obvious to employ a foam having the thickness taught by Higgins '857 in the carpet tile of Higgins '968 with the expectation of producing a light weight, yet resilient carpet tile.

With respect to claims 10 and 11, Higgins '968 is silent with about the weight of the foam cushion layer. However, as noted above, Higgins '857 teaches said foam layer may be in the range of 10-60 oz/yd². Thus, it would have been obvious to employ a foam having the basis weight taught by Higgins '857 in the carpet tile of Higgins '968 with the expectation of producing a light weight, yet resilient carpet tile.

30. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over either the cited Higgins '857 patent or Higgins '968 patent in view of US 6,089,007 issued to Hamilton et al.

Art Unit: 1771

Higgins '857 and Higgins '968 are silent with respect to the use of bitumen layer an adhesive layer of a carpet tile. However, said use is well-known in the art. For example, Hamilton teaches adhesive layers may include vinyl resins, thermoplastic hot melts, bitumen, or modified bitumen (col. 4, lines 25-36). Thus, it would have been obvious to employ a bitumen composition as the adhesive layer of the Higgins '857 or Higgins '968 carpet tiles with the expectation of producing a strong bond between the primary backing and the foam cushion of the carpet tile.

Conclusion

31. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is 703-305-4472. The Examiner can normally be reached on Monday-Friday 10am-6pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



CHERYL A. JUSKA
PRIMARY EXAMINER

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September 21, 2002